TARGET ACCESS

TARGET Counsels US Courts on Disability

TARGET Access

Issue # 12

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In early October, TARGET staff traveled from Washington D.C. to New York to provide a presentation to the U.S. District Court in Manhattan on reasonable accommodations for people with disabilities. This service was provided through an agreement with the court to provide resources and support for disability-related issues. TARGET presented information on assistive technology and general strategies for accommodating jurors, witnesses, and court observers with disabilities.

U.S. District Judge Laura Taylor Swain said that TARGET's presentation gave the District Court "timely and useful information as well as food for thought. All who attended commented favorably on the quality and content of [TARGET's] presentation."

One of the USDA TARGET Center's lesser-known missions involves "educating and advocating for the integration of assistive technology and worksite accommodations." This aspect of the mission applies both within and without the USDA. If you would like to use the TARGET Center as a resource for developing a program in your agency, please call 202-720-2600 (v/tty).

Technology Update: Hearing Aids & Cell Phone Use

The emergence of cell phones as an affordable, mobile communication tool has changed the way we think about telecommunications. In fact, cell phones have become commonplace in both the home and work place,

creating a setting for a diverse range of users. These include people with disabilities, such as USDA employees who are hard of hearing. Unfortunately, cell phones have some known compatibility issues with hearing aids.

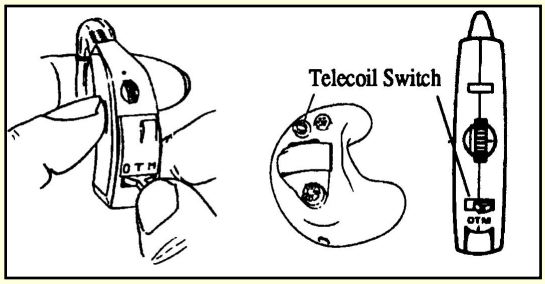
How do hearing aids work?

In general, a hearing aid operates by using a microphone to pick up sound waves in the air and convert the sound waves to electrical signals. The signals are then amplified as needed and converted back to audible sounds for the user to hear. The hearing aid's microphone, however, does not always work well in conjunction with audio devices like headsets, telephone handsets, and audio players. The acoustic connection made between the audio device and the hearing aid is poor and creates distortions in the sound. In addition, background noise is often picked up by the hearing aid's microphone and interferes with the desired audio.

To eliminate this problem, a connection needs to be made from the device directly into the hearing aid. Therefore, in order for an audio device such as a wireless handset or telephone to be hearing aid compatible, the device must be able to transfer audio information from the device to the hearing aid without use of the hearing aid's built-in microphone. This transfer of electrical signals is accomplished by using a telecoil or "T-Coil."

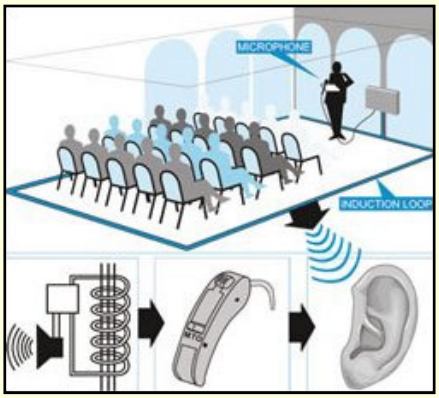
What is a T-Coil?

T-coils are comprised of a metal core (or rod) around which ultra-fine wire is coiled. A T-Coil is built within a hearing aid that serves as an antenna that can be activated by the switch on the hearing aid when it is set in the "T" position. The T-coil detects electromagnetic energy and converts it to electrical energy and then sends the signal to the hearing aid circuit or processor for amplification. It allows a signal to be coupled from an audio source with a T-Coil to the hearing aid without a wired electrical connection to the hearing aid, and it avoids the problems that microphones would have.



It is believed that only 30 percent of hearing aids in the United States have T- Coils, and many of the people owning such hearing aids do not really understand the benefits/uses of T-Coils.

One common usage involves having meetings where the room is "looped." This means that a wire (telephone like) will run around the room, either at the floor or ceiling, exposed or concealed. The wire creates a circle, or loop, around the room that then plugs in to the public address system. When anything is said into the microphone, a signal is sent in the form of sound waves to the loudspeakers and also through the loop, creating a magnetic induction field within the loop. This field lets anyone in the room with a hearing aid equipped with a T-switch to be able to hear quite clearly anything said into the microphone.



In addition to enabled telephones and loop systems, the T-Coil is made to pick up almost any electromagnetic energy; unfortunately it cannot discriminate between wanted and unwanted signals. Hearing-aid users who use a T-Coil often notice interference or humming from fluorescent lighting, TV screens, computer monitors, cell phones, and other sources of electromagnetic energy. Most users know that placing some distance between the hearing aid and the source of the interference can significantly reduce or eliminate the interference.

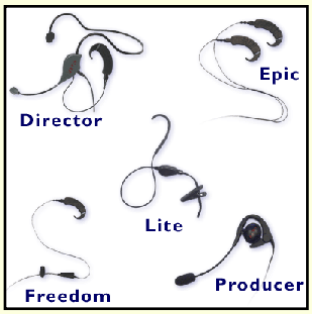
What problems exist when using a cell phone with a T-Coil-equipped hearing aid?

Achieving hearing aid compatibility with a cell phone presents special problems. Most wireless phone users hold the phone to the ear or wear headset devices on their ear, which is not feasible for hearing aid users due to interference. Older analog wireless handsets equipped with a T-coil can generally achieve compatibility with T-coil-equipped hearing aids with minimal interference. However, today's digital phones emit fluctuating radio energy and cause greater interference into the hearing aid. Fortunately, external devices are readily available, which make otherwise non-compatible wireless devices compatible with hearing aids.

What devices exist that can avoid these problems?

As previously mentioned, one key factor contributing to the interference caused by digital wireless handsets to hearing aids is the close proximity of the transmitter to the hearing aid itself. This interference can best be reduced or eliminated by moving the transmitter away from the ear. External devices are generally available that can make such devices usable by persons with hearing aids. These accessories contain a T-Coil in a headset or earpiece and allow users access to wireless phones while keeping the transmitter away from the hearing aid.

One such product available is the Hearing Aid Telephone Interconnect System (HATIS) device that is produced by the HATIS Corporation. This device is similar to a standard headset with a microphone and earpiece, however, the earpiece has been replaced with a T-Coil. Several HATIS devices were demonstrated last month in the TARGET Center and are now available for trial. Please visit the TARGET Center or call 202-720-2600 (v/tty) for more information.



TARGET Center Fall Open House Brings New Visitors

On October 19, the USDA TARGET Center held its annual *Fall Open House*. The theme of this year's event was Customer Appreciation. All attendees received the popular TARGET Center Monitor Clips as well as information on TARGET's services.

Almost half of those who attended turned out to be new to the TARGET Center. TARGET was pleased to have so many new faces discover the center and what it can offer. Any previous customers who could not attend the open house are encouraged to visit the center and pick up a Customer Appreciation Monitor Clip while supplies last.

TARGET Center Training Schedule

Being Comfortable at Work
December 1, 12 pm - 1 pm
Instructor: David Kay, 202-720-2600
Don't wait until your wrists hurt or your neck aches! Prevent the injuries before they occur. What are the causes of repetitive strain injuries (like Carpal Tunnel Syndrome) and how can you reduce the risks of these injuries? Learn this and more at TARGET's ergonomic training session.

HUD's Being Comfortable At Work Class
Wednesday, December 8
11am to 12pm
To register, phone 202-708-0523 ext. 6755, DeEtta Roberson-Carter, WorkLife Coordinator, HUD Employee Assistance Program.

Making Accessible PDFs
December 8th, 12 pm - 1 pm
Instructor: Paul Lloyd, 202-720-2600
Create accessible, Section 508 compliant PDF files with Adobe 6.0 from MS Word, forms, and other file formats. Listen to a screen reader read an accessible PDF in this training class.

Customizing Your PC
December 15th, 12 pm - 1 pm
Instructor: David Kay, 202-720-2600
Learn how to personalize your PC settings in this TARGET class! Change the colors and font sizes of your desktop and Internet browser. Take full advantage of the tools already on your computer.

Please visit our web site for more information and a complete listing of disability related events.

Helping People. It's What We Do.

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